

# WATER BOARD FINANCIAL ASSURANCE FOR KRFR

# Water Boards' Directive!

- Title 27, §20380(b) **Known or Reasonably Foreseeable Release** — In accordance with applicable requirements of §§22220-22222, waste discharge requirements (WDRs) for a Unit subject to this section shall contain a provision which requires the discharger to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all *known or reasonably foreseeable releases* from the Unit.

# Suggested WDR Language

The Discharger shall obtain and maintain Financial Assurance Instruments (Instruments), which comply with CCR Title 27 (Sections 22207 [Closure Fund], 22212 [Post-Closure Fund], and 22220 et seq. [Corrective Action Fund]) and 40 CFR parts 257 and 258. The Discharger shall evaluate the cost of Financial Assurance to cover the estimated costs of the worse case **known (if appropriate) or** reasonably foreseeable release. The Discharger shall submit a report on financial assurance for corrective action for the Regional Water Board Executive Officer's review and approval. Every five years after submittal of the initial financial assurance report, or earlier if requested by the Executive Officer, the Discharger shall submit a report that either validates the Instruments' ongoing viability or proposes and substantiates any needed changes. The Discharger may combine the three components (Closure, Post Closure, Corrective Action) of the Instruments into one report to comply with this requirement. The **Discharger shall also submit evidence** (e.g., an **acceptance letter from** the California Integrated **Waste Management Board—Financial Assurance Division**) to the Regional Board's Executive Officer that a financial assurance instrument(s) is in place for closure, post-closure, and corrective action **within 120 days of adoption of these WDRs**. The **most recent acceptance letter shall also be included in the Landfill's Annual Report** to the Executive Officer.



# What is Reasonably Foreseeable?

- Solid Waste Assessment Test (SWAT) from mid 1980s to early 1990s
  - At Least 70% of Top 5 Ranks Leaking (20+ Ranks) – New Liner Requirements
  - Central Landfill (Sonoma) + Rumors of Another
- Exceptions??
  - Non-Leaking, Old (25+) LF
    - Reactivate?
    - Climate Change?
    - Poses a Threat to the Environment?
  - Fully Subtitle D with Add-Ons (Later)

# Available Technical Paper

- **Reasonably Foreseeable Water Quality Risks From Lined Landfills - Leachate And Landfill Gas Releases (Richgels, 2006)**
- **Money Spent Up-Front on KRFR Analysis = Long Term Savings**

# What Should be Included in KRFR Corrective Action Cost Estimate

- Investigation and Confirmation
  - Additional Wells/Borings
  - Additional Sampling
  - Additional Reporting
- Remedial Action Plan/Feasibility Study
- Capital Costs for Remediation Equipment
- Operations and Maintenance
- Estimated Permit Costs, including Staff Time



# Factors that Reduce Potential for a Release

- Landfill Gas Monitoring and Collection (esp. within the Waste Mass [Targets] or LCRS)
- Double or “One-and-a-Half” Composite Liner
- Low Leachate/Gas Generation LFs
- Alternative Covers??
- Aged Landfill with Sub D
- Bioreactor Landfill?
- **INTENSIVE CQA!!**

# Known Releases

- Operations and Maintenance
- Estimated Time for Cleanup
- Is the FA included in Postclosure Maintenance Estimate?
  - Make Separate Line Item in Plan
  - FA Funding should be Clear



# Now You Have a Friend in the LF Regulatory Business...

[jmello@waterboards.ca.gov](mailto:jmello@waterboards.ca.gov)

916-341-5622